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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,978	04/08/2004	Gino A. DiLullo	BJSC:296D1	9033

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EXAMINER

MARCANTONI, PAUL D .

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/820,978

Applicant(s)

DILULLO ET AL.

Examiner

Paul Marcantoni

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | - Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Applicant's arguments filed 7/15/05 have been fully considered but they are not persuasive.

New Matter:

New Claims 24-38 are rejected under the first paragraph of 35 USC 112 and 35 USC 132 as the specification as originally filed would not appear to provide support for the invention as is now claimed.

The applicants can promptly resolve this by briefly providing the location of support for these claims (original claims or from specification).

35 USC 102/103:

Claims 20-38 are rejected under 35 U.S.C. 102(a,b, or e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Merkley et al. '246 B2, '745 B2, and '744 B2, Duselis et al. '248 or '146 B1, Cheyrezy et al. '162 B1, Gleeson et al. '697 B2, Mueller et al. '409, Johnson et al. '415, Barrable '555, Baer '115, Matsuo et al., or Sakurai et al.

Note1 : For the above cited references, the rejection over 35 USC 102 is further clarified: Merkley patents are 102(e) references. Duselis patents are also 102(e) references. Cheyrezy et al. is a 102(e) reference. Gleeson et al. is a 102(e) reference. Mueller et al. '409, Johnson et al. '415, Barrable '555, Baer '115, Matsuo et al., and Sakurai et al. are all 102(a) and 102(b) references.

Note2 : Miller '300 and Langton et al. '881 have been withdrawn. Krowl has been withdrawn because it is not prior art.

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All of the above cited references teach a cement composition comprising a natural mineral fiber such as wollastonite in a range of amount greater than 10 wt% cement thus anticipating the instant invention. Even if not anticipated, overlapping ranges of amounts would have been prima facie obvious to one of ordinary skill in the art.

The applicants' new claims to a cement slurry and hardened cement composition does not teach away from the references above either. Cement compositions are essentially in a slurry form when they are made because water is added to the composition and ultimately the cements do cure and harden so these claims do not teach away from the prior art above.

35 USC 112 Second Paragraph:

Claims 20-38 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention.

The terms cement "base" remains vague and deletion of the term base in the claims. Applicants may consider insertion of aqueous —containing—fluid and deleting the term base to resolve this issue.

Response:

"Based"

The applicants argue that the term base is not vague and applicants can be their own lexicographer. The examiner disagrees for this reason. The use of "aqueous based fluid" is not clear because one cannot determine whether the water is still part of

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the final mixed composition. The examiner suggests the use of the word —containing--- so it is aqueous containing fluid if the water is still present in the fluid. Oftentimes additives do not retain their original identity in a mixture after its addition. The amendment to —containing--- would resolve this issue.

35 USC 102/103:

The applicants argue that the prior art does not teach that their fiber containing cement compositions result in a slurry that forms a cement composition having a ratio of flexural strength to compressive strength that is greater than or equal to about 0.35 when the cement slurry is exposed to a temperature of greater than 180⁰ F. In rebuttal, the applicants are arguing process limitations and physical properties resulting from thermal treatment of a cement composition having an identical composition with an amount of natural mineral fiber greater than 10 wt% of cement. All the prior art cited above teaches this amount of natural mineral fibers such as wollastonite just as applicants do for their invention and thus the properties as a result of thermal or heat treatment (e..g. strength) would have been expected to be the same.

The request to submit an affidavit is also respectfully denied and the examiner is not using personal knowledge. The applicants, like the prior art, both claim a cement composition which is in slurry form as a result of water being added, that contains an overlapping amount of natural mineral fiber such as wollastonite and thus the properties resulting would also have been expected to be the same.

Also, the applicants should also note that they would appear to claim a composition that is broader than is originally disclosed and enabled by their invention. Applicants do not have support for any natural mineral fiber but only those enabled by their own specification. Applicants are referred to Table 1 on page 22 of their specification wherein only wollastonite fiber and algamatolite fiber result in a ductility ratio (flexural strength to compressive strength ratio) of 0.33 and 0.35 respectively. It is certain that algamatolite fiber does teach 0.35 but it is not certain whether 0.33 for wollastonite fiber is about 0.35.

Reference Cited of Interest from Applicants' PTO-1449:

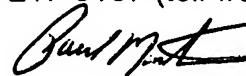
The reference from Cement and Concrete Research Vol.24, No.2 pp 2502-258, Low et al. "The Flexural Toughness and Ductility of Portland cement based Binders Reinforced with Wollastonite Micro-Fibres" has been cited of interest because it too could have been used in the grounds of rejection because it teaches the addition of 2 to 15% by volume of wollastonite microfibers that can be added to a cement matrix. However, there are numerous references above that teach wollastonite fibers and thus the use of this reference was not necessary.

Nevertheless, the examiner maintains his position is correct and has responded fully to applicants' remarks and the finality of this office action is now proper. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Marcantoni whose telephone number is 571-272-1373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Paul Marcantoni
Primary Examiner
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